

### Abstract of the Disclosure

A method for producing an optical element having a multi-layered antireflection film formed on a synthetic resin substrate, in which the antireflection film formed has good heat resistance, and its heat resistance lowers little with time. At least one high-refraction layer of the multi-layered anti-reflection film contains niobium oxide, zirconium oxide, yttrium oxide, and optionally aluminum oxide. High-refraction layers can be formed within a shorter period of time while not detracting from the good physical properties intrinsic to the layers.

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